



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/540,347

06/21/2005

Robert Fernand Bujeau

006593-2064

6408

33375

7590

02/12/2009

THOMPSON HINE LLP  
Intellectual Property Group  
P.O. Box 8801  
DAYTON, OH 45401-8801

EXAMINER

NDUBIZU, CHUKA CLEMENT

ART UNIT

PAPER NUMBER

3743

MAIL DATE

DELIVERY MODE

02/12/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/540,347	<b>Applicant(s)</b> BUJEAU ET AL.	
	<b>Examiner</b> CHUKA C. NDUBIZU	<b>Art Unit</b> 3743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 November 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 101-107 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-13,101 and 103-107 is/are rejected.
- 7) ☒ Claim(s) 3, 102 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/13/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 18 2008 has been entered.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the air outlet in the regulation chamber must be shown or the feature canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

Art Unit: 3743

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 4-12, 101, 103-107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. (US 6,987,246).

With respect to claim 1, Hansen discloses an oven for cooking food (see fig. 5), the oven comprising: an enclosure for receiving food to be heated and for containing a

Art Unit: 3743

cooking atmosphere 14A, the enclosure comprising two horizontal walls forming respectively a bottom wall and a top wall, interconnected by at least two vertical side walls, the enclosure being closed by at least one door that is likewise vertical, and communicating with the outside via an exhaust opening for exhausting gas inside the enclosure and at a pressure above atmospheric pressure (see fig. 5; exhaust opening is proximate to condensate tank 104A); and a heater device 22a for heating the cooking atmosphere; the oven being characterized by the fact that it comprises: a regulation chamber 200, filled at least in part with a liquid of volume adapted to vary between a high level and a low level, the regulation chamber communicating with the enclosure via an air inlet 208; and an air admission duct 202 which extends between a high end and a low end, the high end opening out outside the regulation chamber and the enclosure, and the low end being closed by the liquid in the regulation chamber when the level of the liquid corresponds substantially to its high level (the air admission duct is considered to be "closed" by the chamber in that the chamber is a substantially confined space surrounding the outlet of the air admission duct).

Hansen's air admission duct does not have the low end within the liquid in the regulation chamber when the level of the liquid corresponds substantially to the high level such that the low end is closed by contact with the liquid. However, Applicant discloses in pages 32 and 33 of the Specification that the low end of the air admission duct can be above or below the water level; and the air admission duct serves two functions (1) to enable air to penetrate into the regulator (only when the water lever is below the lower end of the duct) thereby help the regulator govern the humidity in the

Art Unit: 3743

enclosure and (2) govern the pressure inside the enclosure. Air entering into Hansen's air admission tube 202 is capable of penetrating into the regulator since the water level is below the low end of the duct (see fig 5) thereby help the regulator govern the humidity in the enclosure (regulator is in communication with enclosure 14A through 212); and also Hansen's air admission duct is capable of governing the pressure inside the enclosure (since 202 is in communication with enclosure 14A through 212). It would be obvious to one of ordinary skill in the art that Hansen's air admission tube would meet the limitations of the claims since it can perform the functions of the air admission duct as outline in the specification. Thus requiring the air admission duct's low end to be below the water level instead of above it is deemed a matter of design choice which would not affect the function of the device (regulator). Applicant failed to disclose any criticality for having the low end of the air admission duct being below the (high) water level instead of above it.

With respect to claim 2, Hansen further discloses the claimed subject matter including an evacuation chamber 104a filled at least in part with a liquid of volume that is adapted to vary between a high level and a low level, said evacuation chamber communicating with the regulation chamber during oven cooking operations. (communication via overflow tube 204).

With respect to claim 4, Hansen further discloses the claimed subject matter including a chimney 87 extending between a first end communicating with the outside of the evacuation chamber and a second end coming over the high level of the liquid, said

second end allowing gas under positive pressure to escape from the enclosure via the evacuation tube.

With respect to claim 5, Hansen further discloses the claimed subject matter including a regulator itself comprising the regulation chamber and the evacuation chamber, these two chambers constituting volumes that are separated from each other at least in part via a partition (side walls of regulation chamber are considered a partition) internal of the regulator and that communicate with each other via a narrow passage (opening of tube 204) in the partition adapted to allow the liquid to flow between these two chambers. With respect to the recitation of “side by side” volumes, this is considered to be a matter of design choice within the purview of one skilled in the art. Applicant has not disclosed any design criticality related to this positional limitation. The choice of whether to locate the regulation chamber above the enclosure 14a or below it and side by side with the evacuation chamber is thus considered to be merely a rearrangement of parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the regulation chamber side by side with the evacuation chamber because rearrangement of parts is considered prima facie obvious. MPEP 2144.04.

With respect to claim 6, Hansen further discloses the claimed subject matter including, in the evacuation chamber, a first temperature probe 80a for measuring the temperature of the gas coming from the exhaust opening a second temperature probe 85a for measuring the temperature of the gas coming into the enclosure via the air inlet. Hansen does not disclose the second temperature probe being “in the regulation

chamber,” but rather proximate to the entrance of the air inlet. The choice of which side of the air inlet to measure temperature, in the absence of a disclosure of criticality, is considered to be a matter of design choice and simple rearrangement of parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to rearrange the temperature sensor to be on the opposite side of the air inlet because rearrangement of parts is considered prima facie obvious. MPEP 2144.04.

With respect to claim 7, Hansen further discloses the claimed subject matter comprising in the evacuation chamber, a first temperature probe 80a for measuring the temperature of the gas coming from the exhaust opening, and a second temperature probe 81a placed below the low level of the liquid in the evacuation chamber.

With respect to claim 8, Hansen further discloses the claimed subject matter including calculation means for determining the relative humidity in the oven as a function of the temperatures measured by the first and second probes. (col. 8, ln. 35-49; col. 9, ln. 51-54; “Under normal operating conditions, the ECU 70A operates to control the water valve as needed to increase or decrease the humidity in the cooking chamber 14A.”)

With respect to claim 9, Hansen further discloses the claimed subject matter including a fan 28a disposed inside the enclosure to stir the cooking atmosphere heated by the heater device, said fan creating a suction zone inside the enclosure, the air inlet being situated substantially in the suction zone of the fan.



With respect to claim 10, Hansen further discloses the claimed subject matter including vapour-producing means 18a, 30a suitable for delivering water vapour into the enclosure, the vapour-producing means external of the regulation chamber.

With respect to claim 11, Hansen further discloses the claimed subject matter in which the exhaust opening for exhausting gas under positive pressure inside the enclosure is situated beneath the heater device. (see fig. 5)

With respect to claim 12, Hansen further discloses the claimed subject matter in which the exhaust opening opens out substantially in the lowest point of the bottom wall. (see fig. 5)

With respect to claim 101, Hansen discloses an oven for cooking food (see fig. 5), the oven comprising: an enclosure for receiving food to be heated and for containing a cooking atmosphere 14A, the enclosure comprising a bottom wall and a top wall, interconnected by at least two side walls, the enclosure being closed by at least one door, and communicating with the outside via an exhaust opening for exhausting gas inside the enclosure and at a pressure above atmospheric pressure (see fig. 5; exhaust opening is proximate to condensate tank 104A); and a heater device 22a for heating the cooking atmosphere; a regulation chamber 200, filled at least in part with a liquid of volume adapted to vary between a high level and a low level, the regulation chamber communicating with the enclosure via an air inlet 208; an air admission duct 202 which extends between a high end and a low end, the high end opening out outside the regulation chamber and the enclosure, and the low end being high the liquid in the regulation chamber when the level of the liquid corresponds substantially to its high

Art Unit: 3743

level; an evacuation chamber filled at least in part with a liquid of volume that is adapted to vary between a high level and a low level, said evacuation chamber communicating with the regulation chamber during oven cooking operations. The limitation of the low end of the air admission duct being below the water level has been met as discussed above.

With respect to claim 103, Hansen further discloses the claimed subject matter including, in the evacuation chamber, a first temperature probe 80a for measuring the temperature of the gas coming from the exhaust opening a second temperature probe 85a for measuring the temperature of the gas coming into the enclosure via the air inlet. Hansen does not disclose the second temperature probe being “in the regulation chamber,” but rather proximate to the entrance of the air inlet. The choice of which side of the air inlet to measure temperature, in the absence of a disclosure of criticality, is considered to be a matter of design choice and simple rearrangement of parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to rearrange the temperature sensor to be on the opposite side of the air inlet because rearrangement of parts is considered prima facie obvious. MPEP 2144.04.

With respect to claim 104, Hansen further discloses the claimed subject matter including a regulator itself comprising the regulation chamber and the evacuation chamber, these two chambers constituting volumes that are separated from each other at least in part via a partition (side walls of regulation chamber are considered a partition) internal of the regulator and that communicate with each other via a narrow passage (opening of tube 204) in the partition adapted to allow the liquid to flow

Art Unit: 3743

between these two chambers. With respect to the recitation of "side by side" volumes, this is considered to be a matter of design choice within the purview of one skilled in the art. Applicant has not disclosed any design criticality related to this positional limitation. The choice of whether to locate the regulation chamber above the enclosure 14a or below it and side by side with the evacuation chamber is thus considered to be merely a rearrangement of parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the regulation chamber side by side with the evacuation chamber because rearrangement of parts is considered prima facie obvious. MPEP 2144.04.

With respect to claim 105 Hansen discloses the limitation of claim 105 as discussed above and further discloses the enclosure 14A communicating with the outside via an exhaust opening for exhausting gas inside the enclosure and at a pressure above atmospheric pressure (see fig. 5); the liquid high level in the regulator chamber defined by an overflow outlet on 208.

With respect to claim 107 Hansen also discloses in the regulation chamber an air outlet 202 that communicates with the air inlet 208, the air outlet located higher than the overflow outlet (see fig 5).

Claims 13 and 106 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al in view of Violi et al 5,768,982. Hansen teaches the invention as claimed and as discussed above.

However, Hansen does not teach an oven wherein the exhaust opening communicates with a siphon adapted to evacuate liquids and condensates from the enclosure while preventing cold air from rising into the enclosure, and the overflow outlet delivers liquid to the siphon.

Violi discloses an oven wherein the exhaust opening 27 communicates with a siphon 29 adapted to evacuate liquids and condensates from the enclosure while preventing cold air from rising into the enclosure, and the overflow outlet 24 delivers liquid to the siphon (see fig 1).

It would have been obvious to one of ordinary skill in the art at the time the invention to modify Hansen's device by providing the discharge pipe with a siphon for the purposes of preventing the entrance of air into the enclosure.

### ***Allowable Subject Matter***

Claims 3 and 102 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments filed on November 18 2008 have been fully considered but they are not persuasive. Applicant's argument that Hansen does not disclose the low end of the air admission duct being below the water level when the water level corresponds to the high level has been fully considered.

Hansen's air admission duct does not have the low end within the liquid in the regulation chamber when the level of the liquid corresponds substantially to the high level such that the low end is closed by contact with the liquid. However, Applicant discloses in pages 32 and 33 of the Specification that the lower end of the air admission duct can be above or below the water level and the air admission duct serves two functions (1) to enable air to penetrate into the regulator (only when the water lever is below the low end of the duct) thereby help the regulator govern the humidity in the enclosure and (2) govern the pressure inside the enclosure. Air entering into Hansen's air admission tube 202 is capable of penetrating into the regulator since the water lever is below the low end of the duct (see fig 5) thereby help the regulator govern the humidity in the enclosure (regulator is in fluid communication with enclosure 14A through 212); and also Hansen's air admission duct is capable of governing the pressure inside the enclosure (since 202 is in fluid communication with enclosure 14A through 212). It would be obvious to one of ordinary skill in the art that Hansen's air admission tube would meet the limitations of the claims since it can perform the functions of the air admission duct as outline in the specification. Thus requiring the air admission duct's low end to be below the water level instead of above it is deemed a matter of design choice which would not affect the function of the device (regulator). Applicant failed to disclose any criticality for having the low end of the air admission duct being below the (high) water level instead of above it.

Applicants argue the merits of three pieces of common law cited in MPEP 2144.04 VI, Rearrangement of Parts. (Remarks, page 8). Examiner notes that *In re*

*Japikse* held a change in the arrangement of parts that "would not have modified the operation of the device" was not patentable over prior art showing a slightly different arrangement of parts. Moreover, the beginning of section 2144.04 states "Examples direct to various common practices which the court has held normally require only ordinary skill in the art and hence are considered routine expedients are discussed below. If the applicant has demonstrated the criticality of a specific limitation, it would not be appropriate to rely solely on case law as the rationale to support an obviousness rejection." Examiner thus takes the position that because Applicants have failed to show criticality, it is proper to rely solely on case law to establish what is merely a matter of ordinary skill in the art. Examiner also notes that the "unified structure or function" Applicant argues is not recited in the claims.

Applicant's argument with respect to the rejection of claim 6 has been considered but not found persuasive. Hansen does not disclose the second temperature probe being "in the regulation chamber," but rather proximate to the entrance of the air inlet. The choice of which side of the air inlet to measure temperature, in the absence of a disclosure of criticality, is considered to be a matter of design choice and simple rearrangement of parts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to rearrange the temperature sensor to be on the opposite side of the air inlet because rearrangement of parts is considered *prima facie* obvious. MPEP 2144.04.

Applicant's argument with respect to new claim 105 is similar to the argument with respect to the rejection of claim 1 which has been addressed above.

After due consideration it is determined that Applicant's claims do not distinguish Applicant's invention over the prior art of record.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUKA C. NDUBIZU whose telephone number is (571)272-6531. The examiner can normally be reached on Monday - Friday 8.30 - 4.30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Rinehart can be reached on 571-272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chuka C Ndubizu/  
Examiner, Art Unit 3743

/Kenneth B Rinehart/  
Supervisory Patent Examiner, Art  
Unit 3743

Application/Control Number: 10/540,347  
Art Unit: 3743

Page 15